

Serial Nr.: 10/829,138
Art Unit: 2874

04150-UPS

AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) A method for packaging a fiber optics device comprising the steps of:
 - (a) preparing a fiber optics sub-assembly with a specific function that has at least first and second fibers a fiber extending respectively from [[both]] first and second ends of said fiber optics sub-assembly, said fiber optics sub-assembly including at least one optics component which is not a fiber;
 - (b) inserting [[a]] said first end of said sub-assembly into a housing cap and then permeating a sealant into a narrow gap between said housing cap and said sub-assembly to achieve their tight bonding and air-tightness;
 - (c) reserving a first section of said second fiber outside [[a]] said second end of said sub-assembly;
 - (d) stripping a protective coating of a second section of said second fiber after said first section of said second fiber;
 - (e) inserting said second fiber ~~said second end of said sub-assembly~~ into a hole of a sleeve whose aperture only allows said second fiber to pass through so that said second section of said second fiber is surrounded entirely by said sleeve, and then permeating a sealant into a narrow gap between said second section of said second fiber and said sleeve hole to achieve their tight bonding and air-tightness;
and
 - (f) surrounding said housing cap and said sleeve with a housing tube and then

Serial Nr.: 10/829,138
Art Unit: 2874

04150-UPS

permeating a sealant into narrow gaps between said housing tube and said housing cap, and between said housing tube and said sleeve to achieve their tight bonding and air-tightness;

wherein said first section of said second fiber is surrounded by a free space to allow said first section to expand or bend freely within said fiber optics device.

2. (Currently Amended) The method for packaging a fiber optics device according to claim 1, wherin said second section of said second fiber has a length shorter than that of said sleeve so that said second section of said second fiber is surrounded entirely by said sleeve.
3. (Original) The method for packaging a fiber optics device according to claim 1, wherein joins between said housing tube and said housing cap, and between said housing tube and said sleeve are achieved by a tin soldering process.
4. (Original) The method for packaging a fiber optics device according to claim 1, wherein joins between said housing tube and said housing cap, and between said housing tube and said sleeve are achieved by a laser welding process.
5. (Currently Amended) The method for packaging a fiber optics device according to claim 1, wherein said sleeve and said second section of said second fiber are joined by a tin soldering process.
6. (Currently Amended) The method for packaging a fiber optics device according to claim 1, wherin said sleeve and said second section of said second fiber are joined by a glass soldering process.

Serial Nr.: 10/829,138
Art Unit: 2874

04150-UPS

7. (Original) The method for packaging a fiber optics device according to claim 1, wherein said sealant is epoxy resin.
8. (Original) The method for packaging a fiber optics device according to claim 1, wherein differences in terms of thermal expansion coefficients between said housing tube and the fiber optics sub-assembly are less than $30 \times 10^{-6}/^{\circ}\text{C}$.
9. (Currently Amended) The method for packaging a fiber optics device according to claim 1, wherein a section of said fiber optics sub-assembly joining said housing cap is made of a material that is completely moisture-proof, said material being a metal or ceramic.
10. (Currently Amended) The method for packaging a fiber optics device according to claim 1, wherein said housing cap and said sleeve are made of a material that is completely moisture-proof, said material being a metal or ceramic.
11. (Currently Amended) A packaging structure for a fiber optics device comprising:
 - a fiber optics sub-assembly having at least first and second fibers a fiber extending respectively from [[both]] first and second ends of said fiber optics sub-assembly, and an optics component which is not a fiber;
 - a housing cap surrounding [[a]] said first end of said fiber optics sub-assembly;
 - a first section of said second fiber extending out of [[a]] said second end of said fiber optics sub-assembly being reserved, and a second section of said second fiber behind said first section of said second fiber being stripped of protecting coating;
 - a sleeve surrounding said second fiber extending out of said second end of said fiber

Serial Nr.: 10/829,138
Art Unit: 2874

04150-UPS

optics sub-assembly with a center hole whose aperture allows only said second fiber to pass through, and covering said second section of said second fiber entirely; and a housing tube surrounding said housing cap and said sleeve;
wherein said first section of said second fiber is surrounded by a free space to allow said first section to expand or bend freely within said packaging structure.

12. (Currently Amended) A packaging structure for a fiber optics device comprising:

a fiber optics sub-assembly having at least a fiber two fibers each respectively extending from one of two [[both]] ends of said fiber optics sub-assembly, and an optics component which is not a fiber;

a first section of each of said [[fiber]] two fibers extending out of said [[both]] two ends of said sub-assembly being reserved, and a second section of each of said [[fiber]] two fibers behind said first section of said fiber being stripped of protecting coating;

two sleeves respectively surrounding said [[fiber]] two fibers extending out of said two [[both]] ends of said sub-assembly respectively, each with a center hole whose aperture allows only a respective fiber of said [[fiber]] two fibers to pass through, and covering said second section of said respective fiber entirely; and

a housing tube surrounding said sleeves;

wherein said first section of each of said two fibers is surrounded by a free space to allow said first section to expand or bend freely within said packaging structure.

Serial Nr.: 10/829,138
Art Unit: 2874

04150-UPS

13. (Currently Amended) A packaging structure for a fiber optics device comprising:

- a fiber optics sub-assembly having a first end sealed and packaged, ~~and having at least a fiber extending from a second end of said fiber optics sub-assembly, and an optics component which is not a fiber;~~
- a first section of said fiber extending out of said second end of said fiber optics sub-assembly being reserved, and a second section of said fiber behind said first section of said fiber being stripped of protecting coating;
- a sleeve surrounding said fiber extending out of said second end of said fiber optics sub-assembly with a center hole whose aperture allows only said fiber to pass through, and covering said second section of said fiber entirely; and
- a housing tube surrounding said first end of said fiber optics sub-assembly and said sleeve;

wherein said first section of said fiber is surrounded by a free space to allow said first section to expand or bend freely within said packaging structure.